AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the application. The following listing provides the amended claims with the amendments marked with deleted material crossed out and new material underlined to show the changes made.

1. (Currently Amended) A method for a functional treatment of urethral sphincters in a mammal, the method comprising administering myoblasts obtainable by culturing said myoblasts in a cell culture medium, wherein the culture medium comprises: ~~Cell culture medium composition containing:~~

(i) at least one of a serum of human origin, a serum fraction of human origin, a serum of animal origin, and a serum fraction of animal origin; ~~serum and/or serum fraction of human origin and/or of animal origin~~

(ii) at least one of insulin ~~or~~ and a derivative of ~~the latter~~ insulin; and

(iii) at least one ~~or more compound(s)~~ compound ~~chosen~~ selected from the class of antioxidants ~~and/or~~ and vitamins.

Claims 2-30 (Canceled).

31. (New) The method of claim 1, wherein the treatment is a treatment of urinary incontinence.

32. (New) The method of claim 1, wherein the culturing comprises at least one of selecting cells and amplifying cells in a cell culture medium, wherein the culture medium comprises:

(i) at least one of a serum of human origin, a serum fraction of human origin, a serum of animal origin, and a serum fraction of animal origin;

(ii) at least one of insulin and a derivative of insulin; and

(iii) at least one compound selected from the class of antioxidants and vitamins.

33. (New) The method of claim 32, wherein performing said cell selection is carried out before, during, or after the performing of said cell amplification.

34. (New) The method of claim 1, wherein the culture medium comprises human serum.

35. (New) The method of claim 34, wherein the human serum concentration is less than 5% by volume.

36. (New) The method of claim 34, wherein said human serum is autologous with said myoblasts.

37. (New) The method of claim 36, wherein the culturing comprises differentiating cells and amplifying cells, wherein cell differentiation is carried out before, during, or after cell amplification.

38. (New) The method of claim 1, wherein the culture medium comprises bovine serum.

39. (New) The method of claim 1, wherein the culture medium further comprises at least one compound selected from the group consisting of bFGF and FGF-2 to FGF-10.

40. (New) The method of claim 1, wherein the insulin derivative is selected from the class of IGFs and vanadate-type insulomimetics.

41. (New) The method of claim 1, wherein the culture medium further comprises a glucocorticoid.

42. (New) The method of claim 1, wherein said selected vitamin is ascorbic acid.

43. (New) The method of claim 1, wherein said selected antioxidant is selected from the group consisting of N-acetyl-cysteine, selenium, and mixtures thereof.

44. (New) The method of claim 1, wherein the culture medium further comprises at least one compound selected from the group consisting of lipophosphatidic acid, EGFs, heregulins, thrombin, PDGF, thyroid hormones and LIF, and mixtures thereof.

45. (New) The method of claim 1, wherein the culture medium comprises serum, insulin, dexamethasone, ascorbic acid, and selenium.

46. (New) The method of claim 1 further comprising at least one of:

performing cell differentiation before, during, or after cell amplification;

performing cell extraction from muscle tissues;

harvesting and separating the cells obtained from said cell extraction;

carrying out a functionality test on the suitability of the myoblasts for forming colonies;

performing a characterization on said myoblasts; and

freezing the myoblasts.

47. (New) The method of claim 1 further comprising at least one of:

performing cell differentiation before, during, or after cell amplification;

performing cell extraction from muscle tissues by using enzymatic digestion;

harvesting and separating the cells obtained from said cell extraction by using enzymatic digestion followed by centrifugation or filtration;

carrying out a functionality test on the suitability of the myoblasts for forming colonies;

carrying out a characterization on said myoblasts with cell cycle markers; and

freezing the myoblasts.

48. (New) A method for a functional treatment of small muscles selected from the group comprising urethral sphincters, anal sphincters, eyelid muscles, muscles of the fingers, and muscles of the larynx, in a mammal, the method comprising administering myoblasts obtainable by culturing said myoblasts in a cell culture medium, wherein the cell culture medium is used during cell amplification, the cell culture medium comprising:

(i) at least one of a human serum, a human serum fraction, an animal serum, and an animal serum fraction;

(ii) at least one of insulin and a derivative selected from the group consisting of IGFs and vanadate-type insulomimetics;

(iii) at least one compound selected from the group consisting of antioxidants, N-acetyl-cysteine, selenium, vitamins and ascorbic acid, and mixtures thereof;

(iv) at least one compound selected from the group consisting of bFGF and FGF-2 to FGF-10;

(v) a glucocorticoid; and

(vi) at least one compound selected from the group consisting of lipophosphatidic acid, EGFs, heregulins, thrombin, PDGF, thyroid hormones and LIF, and mixtures thereof.

49. (New) The method of claim 48, wherein performing cell differentiation is carried out before, during, or after the performing of said cell amplification.

50. (New) The method of claim 48, wherein said human serum is autologous with said myoblasts.

51. (New) The method of claim 50, wherein performing cell differentiation is carried out before, during, or after the performing of said cell amplification.

52. (New) The method of claim 48 further comprising at least one of:

performing cell differentiation before, during, or after said cell amplification;

performing cell extraction from muscle tissues;

harvesting and separating the cells obtained from said cell extraction;

carrying out a functionality test on the suitability of the myoblasts for forming colonies;

performing a characterization on said myoblasts; and

freezing the myoblasts.

53. (New) The method of claim 48 further comprising at least one of:

performing cell differentiation before, during, or after said cell amplification;

performing cell extraction from muscle tissues by using enzymatic digestion;

harvesting and separating the cells obtained from said cell extraction by using enzymatic digestion followed by centrifugation or filtration;

carrying out a functionality test on the suitability of the myoblasts for forming colonies;

carrying out a characterization on said myoblasts with cell cycle markers; and

freezing the myoblasts.

54. (New) A method for a functional treatment of small muscles selected from the group comprising urethral sphincters, anal sphincters, eyelid muscles, muscles of the fingers, and muscles of the larynx, in a mammal, said method comprising administering myoblasts obtainable by culturing said myoblasts in a cell culture medium, the cell culture medium comprising:

(i) at least one of a serum of human origin, a serum fraction of human origin, a serum of animal origin, and a serum fraction of animal origin;

(ii) at least one of insulin and a derivative of insulin; and

(iii) at least one compound selected from the class of antioxidants and vitamins.